IN THE CLAIMS:

The following is a complete listing of the claims indicating their present status and amendments made thereto.

Claims 1-7. **(Cancelled)**

8. **(Currently Amnded)** An adhesive work holding system for securing a workpiece for manufacturing comprising:

a fixture defining an outer periphery capable of blocking transmissions of radiation ~~for holding a workpiece adjacent thereto~~;

at least one discrete, radiation transmittive fixing surface disposed within said outer periphery and bonded to said fixture and having an adhesive receiving surface receiving an adhesive ~~to define a gap between said fixture and the workpiece~~ such that said radiation transmittive fixing surface is a load bearing surface; ~~supports the workpiece on said fixture for allowing work to be performed on the workpiece;~~

a radiant energy delivery system being capable of emitting radiant energy;

said radiant energy delivery system being located adjacent to and in optical communication with said radiation transmittive fixing surface; and

said radiation transmittive fixing surface is capable of transmitting said radiant energy emitted by said radiant energy delivery system toward the adhesive to activate the adhesive and bond the workpiece to said fixing surface.

9. **(Original)** The system according to claim 8, wherein

said radiation transmittive fixing surface is capable of transmitting electromagnetic radiant energy; and said radiant energy delivery system is capable of emitting electromagnetic radiant energy.

10. **(Original)** The system according to claim 8, wherein

said radiation transmittive fixing surface is capable of transmitting electron beam radiant energy; and

said radiant energy delivery system is capable of emitting electron beam radiant energy.

11. **(Original)** The system according to claim 8, wherein said radiation transmittive fixing surface is made of material selected from the group consisting of sapphire, diamond, single crystal silicon dioxide, ruby, cubic zirconia, and zirconium oxide.

12. **(Original)** The system according to claim 8 wherein said radiant energy delivery system comprises a radiant energy source and network of optical channels.

13. **(Original)** The system according to claim 12 wherein said network of optical channels is integral to said fixture.

14. **(Original)** The system according to claim 13 wherein:

said network of optical channels comprise an input end and output end;

said output end being located adjacent to said radiation transmittive fixing surface;

said input end being located adjacent to said radiant energy source; and

said radiant energy source being capable of emitting radiant energy.

15. **(Original)** The system according to claim 14, wherein said output end of said network of optical channels is capable of transmitting to said radiation transmittive fixing surface a stationary beam of radiant energy generated by said radiant energy source.

16. **(Original)** The system according to claim 14, wherein:

said radiant energy delivery system further comprises a radiant energy directional source in optical communication between said network of optical channels and

said radiation transmittive fixing surface; and said radiant energy directional source being capable orienting the radiant energy transmitted by said network of optical channels on to said radiation transmittive fixing surface.

17. **(Original)** The system according to claim 12 wherein said radiant energy source is capable of transmitting radiant energy in a wavelength range between 300 nm and 1064 nm.

18. **(Original)** The system according to claim 12 for bonding the workpiece to said radiation transmittive fixing surface wherein said radiant energy source is capable of transmitting radiant energy in a wavelength range approximately between 300 nm and 550 nm.

19. **(Original)** The system according to claim 12 for separating the workpiece from said radiation transmittive fixing surface wherein said radiant energy is capable of transmitting radiant energy in a wavelength range approximately between 600 nm and 1064 nm.

20. **(Previously Presented)** The system according to claim 8 wherein said fixture further comprises mechanical locators to position the workpiece relative to said fixture.

21. **(Original)** The system according to claim 20 wherein said mechanical locators are capable of being disengaged, whereby said mechanical locators do not interfere with the manufacturing.

22. **(Original)** The system according to claim 20 wherein said mechanical locators are capable of being removed, whereby said mechanical locators do not interfere with the manufacturing.

23. **(Original)** The system according to claim 20 wherein said mechanical locators are capable of being retracted, whereby said mechanical locators do not interfere with the manufacturing.

24. **(Original)** The system according to claim 12 wherein said network of optical channels are selected from the group consisting of internally reflective light guides, reflective members, mirrors, and lenses.

Claims 25-30. **(Cancelled).**

31. **(Original)** The system according to claim 8 wherein:

said radiation transmittive fixing surface are integral; and

said integral radiant energy delivery system comprises,

a sealed load-bearing bulb made of material selected from the group consisting of sapphire, diamond, single crystal silicon dioxide, ruby, cubic zirconia, and zirconium oxide;

electrodes disposed within said sealed load-bearing bulb;

a gas capable of emitting radiant energy in a wavelength range between 300 nm and 550 nm disposed within said sealed load-bearing bulb; and

a plurality of electrical wires connected to said electrodes.

32. **(Previously Presented)** The system according to claim 8 wherein said radiation transmittive fixing surface is further defined as being shaped to conform with an adherent surface of the workpiece.

33. **(Previously Presented)** The system according to claim 8 wherein said radiation transmittive fixing surface is further defined as a wave guide or lens capable of redirecting radiation from said radiant energy delivery system.

34. **(Previously Presented)** An adhesive work holding system for securing a workpiece for manufacturing comprising:

a fixture;

a radiation transmittive fixing surface supporting a workpiece on said fixture for allowing work to be performed on the workpiece;

a radiant energy delivery system comprising a radiant energy source being capable of emitting radiant energy and a network of optical channels being capable of transmitting radiant energy;

said radiant energy delivery system being located adjacent to and in optical communication with said radiation transmittive fixing surface via said optical channels; and

said radiation transmittive fixing surface is capable of transmitting said radiant energy emitted by said radiant energy source.

35. **(New)** An adhesive work holding system for securing a workpiece for manufacturing comprising:

a fixture for holding a workpiece adjacent thereto;

a radiant energy delivery system being capable of emitting radiant energy;

a radiation transmittive fixing surface supported by said fixture and in optical communication with said radiant energy delivery system; and

said radiation transmittive fixing surface defining an adhesive receiving surface receiving an adhesive such that said radiation transmittive fixing surface is a load bearing surface and said radiation transmittive fixing surface is made of material selected from the group consisting of sapphire, diamond, single crystal silicon dioxide, ruby, cubic zirconia, and zirconium oxide.

36. **(New)** An adhesive work holding system for securing a workpiece for manufacturing comprising:

a gripper pin chassis;

a radiant energy delivery system capable of emitting radiant energy; and

a gripper pin supported by said gripper pin chassis and in optical communication with said radiation transmittive fixing surface;

wherein said gripper pin is made of a material capable of transmitting said radiant energy emitted by said radiant energy source selected from the group consisting of sapphire, diamond, single crystal silicon dioxide, ruby, cubic zirconia, and zirconium oxide.